

0430

JHDO



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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/043,787

DATE: 02/11/2002

TIME: 10:01:45

Input Set : F:\46699-20002.txt

Output Set: N:\CRF3\02112002\J043787.raw

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4 <110> APPLICANT: Yuan, Chong-Sheng
 6 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR ASSAYING
 7 HOMOCYSTEINE
 9 <130> FILE REFERENCE: 46699-20002.21
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/043,787
 C--> 12 <141> CURRENT FILING DATE: 2002-01-10
 14 <150> PRIOR APPLICATION NUMBER: US 60/301,895
 15 <151> PRIOR FILING DATE: 2001-06-29
 17 <150> PRIOR APPLICATION NUMBER: US 09/457,205
 18 <151> PRIOR FILING DATE: 1999-12-06
 20 <150> PRIOR APPLICATION NUMBER: US 09/347,878
 21 <151> PRIOR FILING DATE: 1999-07-06
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 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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 28 <211> LENGTH: 432
 29 <212> TYPE: PRT
 30 <213> ORGANISM: Homo sapiens
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 35 Trp Gly Arg Lys Ala Leu Asp Ile Ala Glu Asn Glu Met Pro Gly Leu
 36 20 25 30
 37 Met Arg Met Arg Glu Arg Tyr Ser Ala Ser Lys Pro Leu Lys Gly Ala
 38 35 40 45
 39 Arg Ile Ala Gly Cys Leu His Met Thr Val Glu Thr Ala Val Leu Ile
 40 50 55 60
 41 Glu Thr Leu Val Thr Leu Gly Ala Glu Val Gln Trp Ser Ser Cys Asn
 42 65 70 75 80
 43 Ile Phe Ser Thr Gln Asn His Ala Ala Ala Ile Ala Lys Ala Gly
 44 85 90 95
 45 Ile Pro Val Tyr Ala Trp Lys Gly Glu Thr Asp Glu Glu Tyr Leu Trp
 46 100 105 110
 47 Cys Ile Glu Gln Thr Leu Tyr Phe Lys Asp Gly Pro Leu Asn Met Ile
 48 115 120 125
 49 Leu Asp Asp Gly Gly Asp Leu Thr Asn Leu Ile His Thr Lys Tyr Pro
 50 130 135 140
 51 Gln Leu Leu Pro Gly Ile Arg Gly Ile Ser Glu Glu Thr Thr Thr Gly
 52 145 150 155 160
 53 Val His Asn Leu Tyr Lys Met Met Ala Asn Gly Ile Leu Lys Val Pro
 54 165 170 175
 55 Ala Ile Asn Val Asn Asp Ser Val Thr Lys Ser Lys Phe Asp Asn Leu
 56 180 185 190

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57 Tyr Gly Cys Arg Glu Ser Leu Ile Asp Gly Ile Lys Arg Ala Thr Asp
58      195      200      205
59 Val Met Ile Ala Gly Lys Val Ala Val Val Ala Gly Tyr Gly Asp Val
60      210      215      220
61 Gly Lys Gly Cys Ala Gln Ala Leu Arg Gly Phe Gly Ala Arg Val Ile
62 225      230      235      240
63 Ile Thr Glu Ile Asp Pro Ile Asn Ala Leu Gln Ala Ala Met Glu Gly
64      245      250      255
65 Tyr Glu Val Thr Thr Met Asp Glu Ala Cys Gln Glu Gly Asn Ile Phe
66      260      265      270
67 Val Thr Thr Thr Gly Cys Ile Asp Ile Ile Leu Gly Arg His Phe Glu
68      275      280      285
69 Gln Met Lys Asp Asp Ala Ile Val Cys Asn Ile Gly His Phe Asp Val
70      290      295      300
71 Glu Ile Asp Val Lys Trp Leu Asn Glu Asn Ala Val Glu Lys Val Asn
72 305      310      315      320
73 Ile Lys Pro Gln Val Asp Arg Tyr Arg Leu Lys Asn Gly Arg Arg Ile
74      325      330      335
75 Ile Leu Leu Ala Glu Gly Arg Leu Val Asn Leu Gly Cys Ala Met Gly
76      340      345      350
77 His Pro Ser Phe Val Met Ser Asn Ser Phe Thr Asn Gln Val Met Ala
78      355      360      365
79 Gln Ile Glu Leu Trp Thr His Pro Asp Lys Tyr Pro Val Gly Val His
80      370      375      380
81 Phe Leu Pro Lys Lys Leu Asp Glu Ala Val Ala Glu Ala His Leu Gly
82 385      390      395      400
83 Lys Leu Asn Val Lys Leu Thr Lys Leu Thr Glu Lys Gln Ala Gln Tyr
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85 Leu Gly Met Ser Cys Asp Gly Pro Phe Lys Pro Asp His Tyr Arg Tyr
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88 <210> SEQ ID NO: 2

89 <211> LENGTH: 2211

90 <212> TYPE: DNA

91 <213> ORGANISM: Homo sapiens

93 <400> SEQUENCE: 2

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95 tgccctacaa agtcgccgac atcggcctgg ctgcctgggg acgcaaggcc ctggacattg      120
96 ctgagaacga gatgccgggc ctgatgcgta tgcgggagcg gtactcggcc tccaagccac      180
97 tgaagggcgc ccgcatecgt ggtgcctgc acatgaccgt ggagacggcc gtccctcattg      240
98 agaccctcgt caccctgggt gctgaggtgc agtgggtccag ctgcaacatc ttctccacc      300
99 agaaccatgc ggcggctgcc attgccaaagg ctggcattcc ggtgtatgcc tggaagggcg      360
100 aaacggacga ggagtacctg tggatgattg agcagaccct gtacttcaag gacgggcccc      420
101 tcaacatgat tctggacgac gggggcgacc tcaccaacct catccacacc aagtaccgcg      480
102 agcttctgcc aggcattccga ggcattctctg aggagaccac gactggggtc cacaacctct      540
103 acaagatgat ggccaatggg atcctcaagg tgcctgccat caatgtcaat gactccgtca      600
104 ccaagagcaa gtttgacaac ctctatggct gccgggagtc cctcatagat ggcattcaagc      660
105 gggccacaga tgtgatgatt gccggcaagg tagcgggtgg agcaggctat ggtgatgtgg      720
106 gcaagggctg tgcccaggcc ctgcgggggt tcggagcccg cgtcatcatc accgagattg      780
107 accccatcaa cgcactgcag gctgccatgg agggctatga ggtgaccacc atggatgagg      840

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108 cctgtcagga gggcaacatc tttgtcacca ccacaggctg tattgacatc atccttggcc 900
109 ggtaggtgcc agatgggggg tcccggggag tgagggagga gggcagagtt gggacagctt 960
110 tctgtcccctg acaatctccc acggtcttgg gctgcctgac aggcactttg agcagatgaa 1020
111 ggatgatgcc atttgtgtga acattggaca ctttgacgtg gagatcgatg tcaagtggct 1080
112 caacgagaac gccgtggaga aggtgaacat caagccgcag gtggaccggt atcggttgaa 1140
113 gaatgggcgc cgcacatcc tgctggccga gggtcggctg gtcaacctgg gttgtgccat 1200
114 gggccacccc agcttcgtga tgagtaactc cttcaccaac caggtgatgg cgcagatcga 1260
115 gctgtggacc catccagaca agtaccctgt tggggttcat ttcctgcccagaagctgga 1320
116 tgaggcagtg gctgaagccc acctgggcaa gctgaatgtg aagttgacca agctaactga 1380
117 gaagcaagcc cagtacctgg gcatgtcctg tgatggcccc ttcaagccgg atcactaccg 1440
118 ctactgagag ccaggtctgc gtttcacctt ccagctgtg tccctgcccaggccccacct 1500
119 ctctcccta agagctaata gccaacatt tgtgattggt ttgtcagtg ccccatcga 1560
120 ctctctgggg ctgatcactt agtttttggc ctctgctgca gccgtcatac tgttccaaat 1620
121 gtggcagcgg gaacagagta ccctcttcaa gccccgttca tgatggaggt cccagccaca 1680
122 gggaaacctg agctcagtg tcttggaaaca gctcactaag tcagtccttc cttagcctgg 1740
123 aagtcagtag tggagtcaca aagcccatgt gttttgccat ctaggccttc acctggtctg 1800
124 tggacttata cctgtgtgct tggtttacag gtccagtggt tcttcagccc atgacagatg 1860
125 agaaggggct atattgaagg gcaaagagga actgttgttt gaattttcct gagagcctgg 1920
126 cttagtgctg ggccttctct taaacctcat tacaatgagg ttagtacttt tagtccctgt 1980
127 ttacagggg ttagaataga ctgttaagg gcaactgaga aagaacagag aagtgcagc 2040
128 taggggttga gaggggccag aaaaacatga atgcaggcag atttcgtgaa atctgccacc 2100
129 actttataac cagatggttc ctttcacaac cctgggtcaa aaagagaata atttggccta 2160
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135 <213> ORGANISM: Homo sapiens
137 <220> FEATURE:
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139 <222> LOCATION: (1)...(2226)
140 <223> OTHER INFORMATION: n = A,T,C or G
142 <400> SEQUENCE: 3
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144 gcaaaatata tgggactcaa caaaaatggg ccattcaaac ctaattatta cagatactaa 120
145 tggaccatac taccaaggac cagtcacact gaaccacaca ctctaaagaa atatttttta 180
146 agataacttt tattttcttc ttaactcctt cctcttgatt tttttcctat aatttcattc 240
147 ttgttttttc atctcattat ccaagttctg cagaccacac aggaacttgc ttcattggctc 300
148 tttagatgaa atagaagttc agggttcctc actctagtca ctaaagaagg attttactct 360
149 cccagcccag aaaggtgatt ctttctttac catttctggg gacttttagtc ttaattaggt 420
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151 cgccttaaaa gagcccattt cttagctgct gaaatcagtg ctctttcact tcttcagaga 540
152 agcagggatg gtacctaccc ggcaggtagg ttagatgtgg gtggtgcatg ttaatttccc 600
153 ttagaagttc caagccctgt ttcctgcgta aaggtggtat gtccagttca gagatgtgta 660
154 taatgagcat ggcttggtta gatcaggagg cccacttggg tttatagtat agcccttccct 720
155 ccaactccac cagacttgct catttttcga gtttttaact agactacact ctattgagtt 780
W--> 156 taattttgtc ctctaggatt tattttctgt gtccaaaaaa aaaaanaaaag aaaagaaaaa 840
157 ttaaggagaa tttttggtgt taatgctgag gaattgcttg agtggttagt tgttaccat 900
158 ttctcttttg aacctttgga gctaaggatg ctgagtctag agaaatgcta gtctcaagcc 960
159 ctgttaagtc cctctgtttc tagcccgtag ttcatagcat cagtgaactg gagccacaac 1020

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161 tactcagtat aaagcactga gttctatctt taggatttat ctttaagagc aaatttctgg 1140
162 tcagctgtgc ttctgcaacc taaaatattt aaagggaggt aggtgtgggc aggaggagga 1200
163 atgataaatt gggccagggc aagaaaaatc tagcttcata taatttgtct gggactatac 1260
164 accctatata atgttagttt tacagaagta atatgacttt tgattgctac ataccacaaa 1320
165 gagtttatga actgagatca taaagggcaa ctgatgtgtg aagaaagtag tcagtacatc 1380
166 ctggctcatg ctctgaaaga atatccagag aggcctctct aaagatcagg gagatgtatt 1440
167 cccatgccat gcaccctgct tcccagcatt tctgcatggg caagtgagct ttatgctcat 1500
168 gagctttaag tatataatta tccaggattt taaatcctca acttgttcta gcttgtgatc 1560
169 cctcaaagtt gggtcatacg ttagtgctag atactagaaa ttttcacttt tccactgatc 1620
170 agagagacag acattaaaaa caaaaataga agaaaggaaa gctttcaccc tgcagcttct 1680
171 tagcagggaa caattgtctt gccaaaactt ttttcccttt tctctcccat tttcttttac 1740
172 ccaatccctt cttactcctt gccagtgtga ccatgctttc ttctctgtag atgttaacag 1800
173 ttaaggccta ttttccctcg gcacttaacc aaccaatcag aacaccacat ctgttagggg 1860
174 aggtaacctg gccaacagtg tatccatcac gtttagccctg ctggagggaa gggaccaca 1920
175 ttcacctgcc ctctgacctg ccccttgatc ccatacttat taccgtgtcc ataggaataa 1980
176 taggtaaggg ctctgtctct gtcaagccat gtaacaaagg aactgttaa aaaaaaaaaa 2040
177 aagtctggca tcagaggagg catgtggaga gcaactggg aagaacaagt tcattttgta 2100
178 ttgaatgatt ttaaatgaat gcaatattaa tccttgaga tgagcaataa tcattaaaat 2160
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W--> 180 nngngg 2226
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183 <211> LENGTH: 27
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Primer
190 <400> SEQUENCE: 4
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194 <211> LENGTH: 27
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis
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202 <400> SEQUENCE: 5
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205 <210> SEQ ID NO: 6
206 <211> LENGTH: 27
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208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis
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218 <211> LENGTH: 27

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223 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis
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232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis
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238 <400> SEQUENCE: 8
239 gatctccacg tcagagtgtc caatgtt                                     27
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243 <212> TYPE: DNA
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247 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis
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259 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis
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263 ctccacgtca aagtctccaa tgttaca                                     27
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270 <220> FEATURE:
271 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis
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275 tgtgccatgg gctccccag cttcgtg                                     27
277 <210> SEQ ID NO: 12
278 <211> LENGTH: 27
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: Oligonucleotide used for site-directed mutagenesis

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/043,787

DATE: 02/11/2002

TIME: 10:01:46

Input Set : F:\46699-20002.txt

Output Set: N:\CRF3\02112002\J043787.raw

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
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L:179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:472 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:28